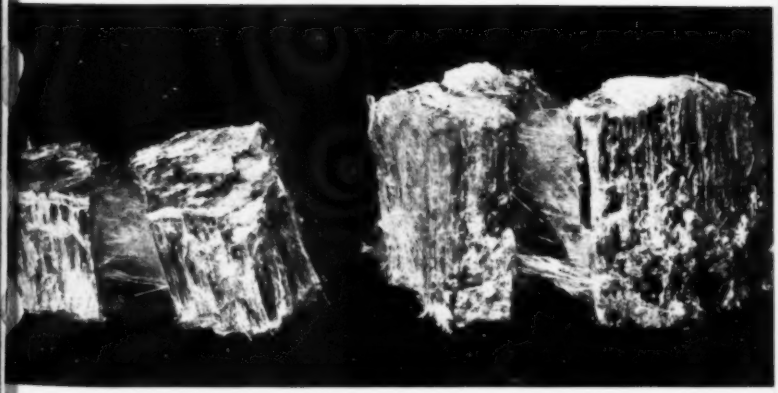
ASBESTOS



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MANUFACTURING COMPANY
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"ASBESTOS"

A MONTHLY MARKET JOURNAL DEVOTED TO THE INTERESTS OF THE ASBESTOS AND MAGNESIA INDUSTRIES

A. S. ROSSITER, *EDITOR*

PUBLISHED BY SECRETARIAL SERVICE
16th FLOOR INQUIRER BUILDING
PHILADELPHIA, PENNSYLVANIA

C. J. STOVER, *Proprietor*

Entered As Second Class Matter November 23, 1923, at the Post Office at Philadelphia, Pennsylvania, Under Act of March 3, 1879

Volume 18 FEBRUARY 1937 Number 8

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SUBSCRIPTION PRICE

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STUDY OF THE STARS--

and the part played by asbestos products

By R. G. Skerrett

Asbestos aids star gazing in the newest and most complete of America's planetariums. Indeed, asbestos plays two essential parts in this institution which makes the story of the stars understandable to the young as well as to the mature. We refer to the Hayden Planetarium in New York City which, in the short time it has been open to the public has attracted to it thousands of people.

This particular planetarium, one of four now in this country is exceptional in that it has really two planetariums within a single building. That is to say, there is a Copernican planetarium that consists of a flat circular ceiling serving as a sky in which the celestial bodies are made visible and follow their ordered courses; and there is a Zeiss projection planetarium which provides a domed ceiling on which are thrown the glimmering stars and nebulae with a simulation of the limitless depth of the sky. The projector, itself, is a great dumb-bell-like instrument about 12 feet long, mounted centrally on its longitudinal axis, and capable of being rotated so as to display the positions of the visible planets and their movements in either of the celestial hemispheres.

The effectiveness of the projection planetarium depends fundamentally upon the domed ceiling that forms the screen, so to speak, on which the heavenly bodies are made to appear and to rise and to set so that the progress of hours, months, and years can be covered in the course of a span of minutes. Similarly, the positions of the stars thousands of years in the past and their locations in the heavens thousands of years hence can be indicated precisely. This gripping and informative spectacle has been made possible in the Hayden Planetarium by an architectural achievement in the form of the hemispherical dome that surmounts the building and which is said to be the first of its kind built in America. The primary aim was to produce a semi-

globular structure of extraordinary thinness, and, at the same time of requisite strength and rigidity.

The reinforced-concrete shell of the dome does not exceed 3½ inches in thickness at its basic springline, and from a zone 9 feet upward to the zenith of the hemisphere the concrete is but 3 inches in thickness. However, because of its shape, the dome is self supporting, without recourse to

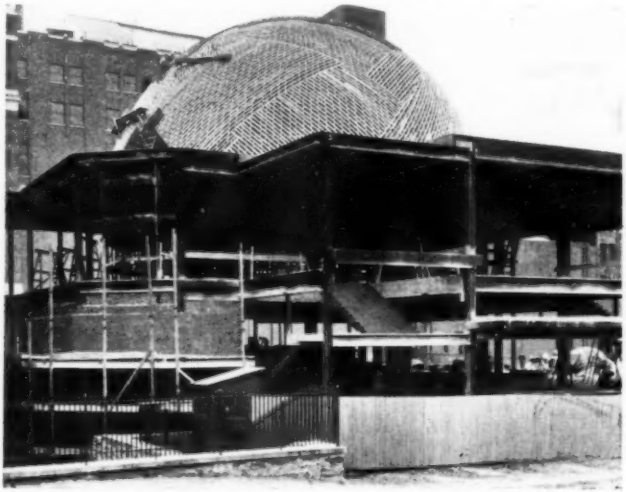

Photo by courtesy Johns-Manville.

Dome of the Hayden Planetarium Building while in course of construction. A lattice-like form of wood served as the temporary support for the reinforced concrete of the permanent dome.

any interior or exterior bracing, altho rings of small steel rods are embedded in the concrete to give increased stiffness. The outer surface of the dome is covered with a 1½ inch layer of nailcrete, a combination of asbestos and cement, that acts both as an insulator and as a light and necessary material to which the final copper sheathing of the dome could be fastened. The nailcrete, the rock cork,

which lines the inner surface and the intramural air space will exclude the heat of the summer sun or shut out the cold of the severest of winter days. The composite dome, notwithstanding its extraordinarily thin shell, is fully strong enough to sustain the pull of the suspended steel ceiling, which weighs about 30,000 pounds.

From the very nature of the service required, both the Copernican planetarium and the Zeiss planetarium are placed centrally in the building and have no windows. This introduces a problem in ventilation which has been solved by equipping the institution with an air-conditioning plant and a circulatory ventilating system that will keep the atmosphere fresh at all seasons and maintain a suitable temperature so that the planetariums will be cool in the summertime and comfortably warm during the cold months. Asbestos is used extensively in insulating the air-conditioning plant and all the ducts by which the closed circuit of the circulatory system keeps the conditioned air continually on the move.

The projection planetarium shows us the stars from a viewpoint on this globe of ours, while the Copernican planetarium places the observer in space where he can visualize the earth and the other members of the known planetary system.

HOT!

Recent advertisements of Camel's Cigarettes show "Pat" Patton, clad in an asbestos suit, operating on a blazing oil well where, according to the advertisement, "the temperature reaches 3512° Fahrenheit."

Comments one of our readers "Mr. Pat Patton would most certainly die if he went into any serious oil fire in the asbestos equipment illustrated in the advertisement, and we should be interested to know what asbestos will withstand a temperature of 3512° Fahrenheit, and for how long! One is left with the impression from the advertisement that during his fire fighting activities in such conditions, he was smoking 'Camels,' which presumably were made of the same material!" In our opinion this sort of thing does the cause of asbestos no good at all.

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Filtration Packings
Asbestos Shingles and Lumber
Insulating Cements
Asbestos Paper · Pipe Coverings
Asbestos Millboard
High Temperature Cements

THE QUEBEC ASBESTOS CORPORATION

Office and Mines
EAST BROUGHTON, PROVINCE of QUEBEC
CANADA

SEIZURE -- Public and Private

Doubtless all asbestos producers and factors are watching closely and, mayhap, anxiously, the marvelous drama being played by organized labor.

It does no good to rant and rave in pressing one's own opinions. Economically the world has gone stark raving mad and whether it's a Stalin, a Hitler or a Lewis, clearly the unthinking majority, made up of the mob, is ready and willing to be led anywhere or nowhere by the demagogue whose promises are many and whose performances are nil.

The spectacle of privately owned buildings and machines, presumably protected by laws, being seized and forcibly occupied by striking workmen is the high point, so far, in mob anarchy. Then the do nothing, say nothing policy being followed by millions of owner stockholders is even worse.

If all owners of property in this country, regardless of *kind* of property, were to unitedly demand their rights, such a large majority would appear on the side of law and order that we would quickly restore right perspective.

Nearly everybody owns property. If striking workers can seize a plant why cannot I as an individual having less of this world's goods than my neighbor has, just walk into his house and demand some of his wealth under pain of my sitting in his living room until he concedes my point.

Not one single difference can be found between these two cases.

What's next?

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Through constant research in the J-M Laboratories, scores of other items have been developed, important to the economic and physical welfare of people throughout the country.

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THE FUR TRADE--
Step by Step with Asbestos

By F. R. Cozzens.

The conversion of pelts into wearing apparel, one of the oldest industries known, brings to this country an annual income of more than six billion dollars. Thousands of men and women are gainfully employed collecting, curing, and transporting the pelts to markets where skilled furriers, thru the arts of chemistry, styling, and needlecraft, convert them into luxurious garments. By such cooperation, furs, once the symbol of royalty, have become a mark of distinction for the masses, and especially noteworthy is the fact that asbestos has played a very important part in making this condition possible.

The foundation of all fur garments is a prime animal pelt, one taken during the cold winter months. After remaining a few days on a drying board, the pelt is sent by the trapper to a collecting agency where it is placed with thousands of others in a storage room. This room carries a year round temperature of 20 degrees Fahrenheit, and walls and ceiling are heavily insulated with asbestos felt board. The usual construction is a layer of felt board on the inside walls, upon which is nailed wood studding, two inches wide, and spaced three feet apart. The studding is overlaid with another section of felt board, and the space is filled with mineral wool combined with asbestos fibre. As light is detrimental to furs, the windows are provided with removable insulated shutters. After curing is completed, a process requiring from sixty to ninety days, the pelts are removed to another room, turned flesh side out and scraped. Here we find a difficult combination. Animal fat is highly inflammable, and upon the fur of the pelt is a peculiar lint which is injurious to workers and also intensifies the fire risk of the fat. The floor of this room is specially constructed of asbestos fibre and Portland cement mixtures or, if the floor be of wood, a series of three to five layers of hot-mopped asbestos paper are applied over the surface. Walls and ceilings are provided with remov-

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able curtains, made of asbestos cloth. The rough fibre surface catches and retains lint better than any other known agent, and at intervals they are taken outside the building and cleaned with a firegun. Another advantage of the asbestos curtains is that in case of sudden combustion, they can be quickly dropped over a pile of furs as an aid in stifling flames.

After the furs have been thoroly cleaned and combed, they are sent to the finishing room. Temperature here is of minor importance, but we find asbestos board upon the floors and tables as added protection against acids, dyes and salt water brine. We also find workers wearing asbestos gloves and aprons as special protection against anthrax, a serious disease arising from the handling of raw pelts. The workers use asbestos felt sponges, yarns, etc., and many of the finer dyes are strained thru asbestos filter cloth. Lastly the furs are hung in an asbestos insulated vault for fumigation.

From finishing room to finished garment is but a short step, but asbestos is still on the job. The garments are shipped to clothing merchants in huge envelopes, made of heavy grade asbestos paper. The merchants display them on papermache forms containing a high percentage of asbestos fibre, and they are sold out to customers with asbestos cardboard inserts delicately perfumed. The customer has the garment cleaned and serviced at stated intervals in an insured shop, where underwriters require asbestos protection against fire. Lastly, the garment goes into summer quarters in a cold-storage vault, insulated with asbestos materials.

These are but a few of the many ways in which asbestos has served in modernizing an age old industry. Since its introduction to the fur industry in 1910, there has been a marked rise in both volume and quality. Because of its resistance to fire, fumes, acids, oils, lint and brine, asbestos has done more than any other single factor in lifting the fur manufacturing business out of the class of hazardous occupations. Modern furriers in both Europe and America have recognized this fact, and special citations have re-

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Canadian Crude
Canadian Spinning Fibre
Canadian Shingle Fibre
Cyprus Asbestos
Italian Crude
Russian Crude
Rhodesian Crude
South African Blue Crude
South African Yellow Crude

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8 West 40th Street : New York City

Works: MILLINGTON, N. J.

cently been written into the records of the International Fur Exchange.

While at the moment copy of these citations cannot be obtained, comments of various fur manufacturers and dealers will be interesting:

For instance J. Andreas, Furrier of Leige, Belgium, says: "Asbestos has been perhaps the greatest single contribution towards reducing mortality ratio in the Fur Industry from 10.0 in 1915 to 7.5 in 1935".

J. Martin, Fur manufacturer of New York City, writes "The present use of corrosives in artificial coloring of Furs calls for adequate fire and acid protection. For this requirement, rock fibre, commonly called asbestos, ranks near the top."

And John & L. C. Galigher, Fur dealers and exporters of Zanesville, Ohio, writes "With the wealth of asbestos insulation materials now spread upon the open market, fire and explosion in storage rooms can be made almost an impossibility."

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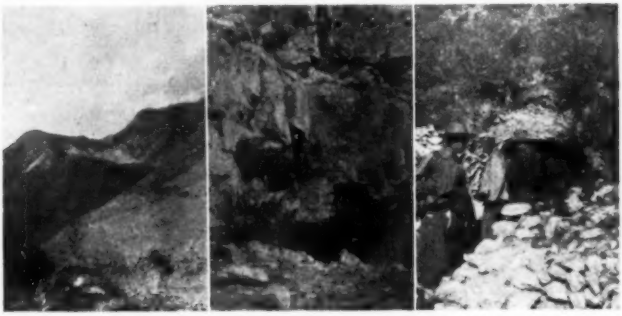
CHINA PRODUCES ASBESTOS

Deposits in Hopei Province Yield 1500 tons annually

The North China Mining Co. produces at its mines in Hopei Province, China, an asbestos fibre which is very white, of good spinning length, silky and strong, if the specimen we have from this deposit is a fair sample of most of the asbestos mined.

The mines are situated at Lai Yuen Hsien and at Chang Ping Hsien, both in Hopei Province, and the annual output of these two mines amounts to 1500 tons, which, according to the producers can be easily disposed of in the domestic market.



1. 2. 3.

The fibre runs from ¼ in. to 1½ in. in length. Another large deposit owned by the same company is located in Szechuan Province, where according to information received, the fibre runs up to one foot in length and is silky and lustrous. However, because of transportation difficulties this deposit has not yet been worked.

The photographs give some idea of the workings, No. 1 showing a general view of the mine pits, No. 2 the mouth of a pit, and No. 3 the workers entering the pit. This particu-

lar pit is worked 100 feet into the earth along the veins of asbestos.

The headquarters of the North China Mining Company is in the National Industrial Bank Building, Consular Road, Tientsin, China, and the company will gladly supply small specimens to anyone interested.

COLORED ASBESTOS CLOTHS--

A special process extends the market for asbestos textiles

American newspapers have recently given quite an amount of space to the new, colored asbestos cloth produced by an English firm—Bell's Asbestos and Engineering Supplies Limited[1], for use in the manufacturing of household articles.

Little has been said in our pages concerning this new asbestos textile, because it has really been in an experimental stage and the manufacturers preferred that their experiments be more nearly complete before information was broadcast to the Asbestos Industry.

Even yet the production and marketing of this new material is only in its initial stage, but some facts are available. Bell's Asbestos and Engineering Supplies Limited has discovered a process which eliminates very largely and, in the case of some cloths, entirely, the inherent disadvantages of the ordinary asbestos cloth in the clamminess of its feeling and the way in which the fibres fluff off on to everything with which they come into contact.

The coloring also is very much better than anything that has previously been made and tests conducted by the manufacturers show that this coloring is as good and in some cases better than that of non-asbestos materials which are generally sold dyed or printed.

The manufacturers have also carried out a series of tests on firemen's equipment, this having already been re-

[1]The address is Bestobell Works, Slough, England.

Rhodesian
Transvaal
Canadian
(BELL MINE)

ASBESTOS

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P. O. Box 1033, Kobe

Raw Asbestos Distributors Limited

13 GROSVENOR GARDENS, VICTORIA
LONDON, S. W. 1 ENGLAND

CABLES:—VULBESTON, LONDON

ferred to in our pages (See "Furnace Tests on Asbestos Suits," page 8 of May 1935 "ASBESTOS").

This new colored asbestos cloth is designed for use in many ways in the household,—aprons, oven cloths, gloves for use around the stove, kettle holders, hearth-rugs—but probably the most extensive use to which it will be put and that with the best commercial possibilities, is for blankets and curtains. Blankets to smother fires in homes and public places; curtains for use in hospitals, ships, hotels and other buildings where an asbestos curtain can serve several purposes—localizing any outbreak of fire, securing safe passage down alleyways or corridors which otherwise would be blocked by flame and smoke or, smothering the fire itself in cases where it is small and discovered before it has gained headway.

The manufacturers will we know, gladly supply further information to the readers of "ASBESTOS" upon special request, and samples also when samples are available.

DURABILITY--

Have we given as much thought to the *durability* of asbestos as this quality of this wonderful mineral deserves?

What is the meaning of durability? One dictionary gives it as—the power of lasting or continuing in any given state without perishing; another—not perishable or changeable; not wearing out or decaying soon.

Asbestos undoubtedly possesses the quality of durability in the fullest meaning of the word, for no one knows how long the asbestos which is being mined today has lain between the rocks which form its matrix. It is believed that asbestos was formed ages ago when the earth was cooling—millions of years ago, as one writer puts it; probably in the early Palezoic age, another one states. The *use* of asbestos, of course, has been known but a paltry 2000 years.

It is not unusual to find rocks which, according to geologists, have existed as long as asbestos, but asbestos,

ASBESTOS

ASBESTOS CORPORATION LIMITED

THETFORD MINES

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TORONTO, ONT.: .....CANADIAN ASBESTOS ONTARIO LTD.
14 Front St.

remember, is of a fibrous character, which makes its sturdy resistance to time even more remarkable.

And when we say the resistance to time, we cover a number of the forces of decay or disintegration. Consider, for instance, that rust attacks steel, but is unknown to asbestos. Erosion often conquers stone—we never even think of erosion in connection with asbestos. Rotting! The idea is fantastic. Electrolytic action—no effect on asbestos. Vermin do not attack it; certain types are even acidproof. It is durable—that is, lasting—under almost any and every condition.

While the popular idea of asbestos is a fireproof material, its durable qualities are very important and possibly could be utilized to as great advantage as has its fire and heatproof qualities.

The one material which appears to consider the durability of asbestos more than any other asbestos product is asbestos-cement, meaning the mixture of asbestos fibre and hydraulic cement from which shingles, corrugated sheathing, board, pipes and other products are made. Hydraulic cement in itself is a fireproof material so that the use of asbestos fibre with it probably does not enhance its fireproof quality very much. Hydraulic cement is also durable to a certain extent, and the addition of asbestos fibre makes it even more durable.

In fact the use of asbestos with hydraulic cement might be described as the mixing of two rocks together, giving a material which is not only lasting, but which, it is claimed, actually improves with time.

Isn't it possible that the consideration by research departments and other experimental agencies of the durability of asbestos (forgetting for the moment its fireproof quality) might lead to other products of as wide a commercial value as those fashioned from asbestos-cement?

The winner usually wins by a small margin—an hour, a minute, a second, a yard, a foot, an inch. It's the little extra effort that puts him across.

Competition is just as afraid of you as you are of it.

JOHNSON'S COMPANY

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Head Office

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THE SALESMAN'S BEST FRIEND
A Lesson in Selling

By J. T. Bartlett

There can be only one answer to the question "Who is a salesman's best friend?" The facts can be ascertained in the experience of thousands of salesmen. The great friend of all is—the Sales Manager!

There is a certain "true confession" which salesmen have made to the writer time after time. It runs like this—

"At first, I really didn't understand all that my sales manager could do for me. I used to gang up with other boys, in a favorite pool hall. We would cuss the boss up and down the street! We were convinced he didn't understand conditions out on the firing line. He expected us to accomplish altogether too much.

"He played favorites. He demanded that we do selling jobs that he couldn't do himself. And so on. Every salesman has heard the same story a great many times!

"Well, I finally woke up. My sales manager, I found, was my best friend. He was the man I could go to with my troubles, sure to get friendly counsel and expert advice.

"As a matter of fact, when I accepted the fact that he knew far more about salesmanship, and firing-line problems than I did, I began to make fast progress."

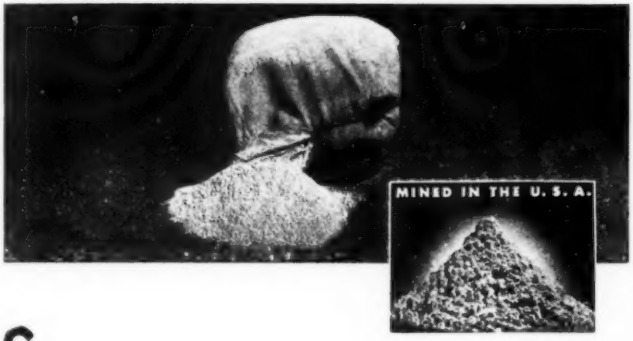
The most tragic of all mistakes any salesman can make is to sell himself on the belief that his salesmanager is incompetent, unfair. Such a salesman is constantly standing in his own light. He is like a splendid race horse who won't take guidance from his jockey. When salesmen give their managers a chance, they come in under the wire winners!

If you have a personal problem—if you are badly worried—if the job, or life itself, seems to be "getting you down"—take your troubles to your sales manager! That is a part of his job—to help his men adjust such situations.

And he has had such experience, he possesses such judgment, that, time after time, he quickly produces the right prescription.

Yes, a salesman's best friend is his sales manager!

VERMONT ASBESTOS



SEND for a sample of this well-fiberized Vermont Asbestos. You will appreciate its bulk, uniformity, and freedom from foreign substances. Prices will interest you.

IDEAL FOR MANUFACTURING

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- Millboard
- Brake Lining
- Clutch Facing
- Roofing Paint
- Asbestos Paper
- Boiler Coverings
- Moulded Products

VERMONT ASBESTOS CORPORATION

HYDE PARK, VERMONT

Sales Office, 500 Fifth Ave., New York City ● Mine, Eden, Vermont

MARKET CONDITIONS

GENERAL BUSINESS

The year 1937 started off with a high note of optimism prevailing in business circles. Business sentiment is still optimistic despite some unfavorable factors—particularly the Ohio Valley floods and the General Motors labor troubles.

The floods are temporary and while far reaching are not the serious menace to business which is the case with the automotive troubles. The necessary curtailment in production of the General Motors line will affect a vast army of persons, cutting purchasing power and slowing down the business whirl quite considerably.

Otherwise business improvement is being sustained as quotation from one source shows: "Wholesale business is off to an exceptional start. More buyers are in the markets than since 1929 and they are placing more orders and at higher prices than a year ago . . . . Manufacturers also have been buying materials farther ahead than in a long time."

ASBESTOS - RAW MATERIAL

For years all sources of supply have not seen the demand which now exists for Raw Asbestos. The United States and Japan are showing the greatest gain over last year. Lack of bottoms is preventing Canadian Mines from shipping present orders for Japan.

Demand for very short grades of fibre is not rising as rapidly as for the longer grades. Prices are firm.

ASBESTOS - MANUFACTURED GOODS

Textiles. There is little if any change in the situation on asbestos textiles since last month. Prices remain firm; volume is fair.

Insulation. High Pressure. Magnesia output continues fairly substantial with prices firm. Some production difficulties are in process of being remedied and the relation between bookings and shipments will return to proper proportions.

Insulation. Low Pressure. This market shows slight

demand at the present time. Prices have increased and it is believed that this will have the effect of stimulating demand, particularly as stocks in many jobbers' hands are low.

Paper and Millboard. There is some slight increase in demand in this market over last month. Prices are firm. Increased costs of production, particularly in raw materials indicate higher prices on these two commodities.

Asbestos Cement Products. The demand for asbestos shingles and sidings has been unusually good for this season of the year due both to generally improved business conditions and unusually favorable weather which has permitted construction and repair work to go ahead almost without interruption during the winter months. The industry is looking forward to another year of increasing volume with more sales for new residential construction added to the established reroofing and residing markets.

Increased industrial construction has improved the demand for the corrugated and flat sheets, while wallboard, tile and other miscellaneous items are also reflecting the effects of the general business upturn.

Opinions from all sources on asbestos markets are always welcome.

The above represent the ideas of various executives in the asbestos industry who are closely in touch with conditions in the respective fields.

ASBESTOS STOCK QUOTATIONS

			January 1937		
	Par	Div.	Low	High	Last
Asbestos Corpn. (Com.) V. T.	np	–	95	112	105
Certainteed (Com.)	np	–	16¼	21½	21⅜
Certainteed (6% Prior Pfd.)	100	6	67⅞	76	74
Flintkote (Com.)	np	–	41	44	42¾
Johns-Manville (Com.)	np	–	143	155	145½
Johns-Manville (Pfd.)	100	7	123½	125⅞	125⅞
Raybestos-Manhattan (Com.)	np	1.50	34½	37¼	36
Ruberoid (Com.)	np	1.00	113	130	125
Thermoid (Com.)	np	–	10¼	12⅞	11⅞
U. S. Gypsum (Com.)	20	–	120¼	131½	131½
U. S. Gypsum (Pfd.)	100	7	166	170½	170½

CONTRACTORS AND DISTRIBUTORS PAGE

Building

The year 1936 provided a construction total in the 37 Eastern States of $2,675,296,000, a gain of 45 per cent over the figure of $1,844,544,900 for 1935, according to F. W. Dodge Corporation. Increases over 1935 were especially pronounced in residential building which showed a gain of 67 per cent in the 1936 figure of $801,623,800 as against only $478,843,100 for 1935. Large increases occurred too, in commercial building, for which the 1936 figure amounted to $249,136,100 as against only $164,479,800 for 1935. For factory building the 37 states' figure totaled $198,019,100 in 1936 as against only $108,858,500 for 1935. Public, educational and institutional building in 1936 amounted to $506,104,500 and compared with only $402,150,300 for 1935.

For Public Works and Utilities the 1936 construction figure reached $920,412,500 as contrasted with only $690,213,200 for 1935. It was in this class of work that the greatest influence of PWA and WPA projects was centered.

The December 1936 total for construction of all descriptions in the 37 Eastern States amounted to $199,695,700 and compares with $208,204,200 for November 1936 and $264,136,500 for December 1935. The loss from December 1935 was entirely due to a shrinkage in public projects of every description.

Residential construction started in December 1936 amounted to $65,487,300 as against $68,440,700 for November 1936 and $45,140,100 for December 1935.

A Useful Table

The very useful table found on the opposite page has been supplied by M. P. Doud of Philadelphia, Pa., an insulation contractor.

The table will be found most convenient in estimating on various sizes of ducts and smoke breechings. It shows superficial measurements of ducts and smoke breechings when they are constructed in rectangular shapes.

In using the table for estimating on insulation work to be applied over surfaces of the ducts or smoke breechings it would, of course, be necessary to add an allowance for the corners or edges, the amount to be added depending upon the thickness of the insulation.

DUCT AND FLUE PERIMETERS

Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet
9	1.5	46	7.67	83	13.83	120	20.
10	1.67	47	7.83	84	14.	121	20.17
11	1.83	48	8.	85	14.17	122	20.33
12	2.	49	8.17	86	14.33	123	20.5
13	2.17	50	8.33	87	14.5	124	20.67
14	2.33	51	8.5	88	14.67	125	20.83
15	2.5	52	8.67	89	14.83	126	21.
16	2.67	53	8.83	90	15.	127	21.17
17	2.83	54	9.	91	15.17	128	21.33
18	3.	55	9.17	92	15.33	129	21.5
19	3.17	56	9.33	93	15.5	130	21.67
20	3.33	57	9.5	94	15.67	131	21.83
21	3.5	58	9.67	95	15.83	132	22.
22	3.67	59	9.83	96	16.	133	22.17
23	3.83	60	10.	97	16.17	134	22.33
24	4.	61	10.17	98	16.33	135	22.5
25	4.17	62	10.33	99	16.5	136	22.67
26	4.33	63	10.5	100	16.67	137	22.83
27	4.5	64	10.67	101	16.83	138	23.
28	4.67	65	10.83	102	17.	139	23.17
29	4.83	66	11.	103	17.17	140	23.33
30	5.	67	11.17	104	17.33	141	23.5
31	5.17	68	11.33	105	17.5	142	23.67
32	5.33	69	11.5	106	17.67	143	23.83
33	5.5	70	11.67	107	17.83	144	24.
34	5.67	71	11.83	108	18.	145	24.17
35	5.83	72	12.	109	18.17	146	24.33
36	6.	73	12.17	110	18.33	147	24.5
37	6.17	74	12.33	111	18.5	148	24.67
38	6.33	75	12.5	112	18.67	149	24.83
39	6.5	76	12.67	113	18.83	150	25.
40	6.67	77	12.83	114	19.	151	25.17
41	6.83	78	13.	115	19.17	152	25.33
42	7.	79	13.17	116	19.33	153	25.5
43	7.17	80	13.33	117	19.5	154	25.67
44	7.33	81	13.5	118	19.67	155	25.83
45	7.5	82	13.67	119	19.83	156	26.

Table by courtesy of M. P. Doud, Philadelphia

Example: Duct 38" × 104" × (100' long)
Add 6.33' + 17.33' = 23.66 ft. circ.
(or 2366 sq. ft.)

Africa (Rhodesia)

(Statistics published by Rhodesia Chamber of Mines.)

	November 1936 Tons (2000 lbs.)	Value £	s	d
Bulawayo District				
Shabanie (R. &. Gen. Asb., Corp., Ltd.	3,559.18	54,667	17	3
Nil Desperandum (Afr. Asb. Mng. Co. Ltd.)	472.60	5,099	5	2
Pangani (Mrs. B. Hancock)	46.00	455	0	0
Victoria District				
D. S. O. (Mashaba Rho. Asb. Co., Ltd.)	98.00	1,199	0	0
Gath's and King (Rho. & Gen. Asb. Corp. Ltd)	602.62	8,025	9	9
Murie Asbestos (Mashaba Rho. Asb. Co. Ltd)	23.00	289	0	0
	4,801.40	69,735	12	2
November 1935	*3,992.25*	*58,758*	*1*	*3*

Africa (Union of South)

(Statistics published by Dept. of Mines & Industries of U. of S. A.)

	November 1936 Tons (2000 lbs.)
Transvaal	
Amosite	365.02
Blue	26.15
Chrysotile	1,427.49
Cape	
Blue	274.87
	2,093.53

Canada

(Statistics published by Bureau of Mines, Province of Quebec)

	November 1935 Tons (2000 lbs.)	November 1936 Tons (2000 lbs.)
Fibre	25,528	37,086
	December 1935	December 1936
Fibre	15,924	21,485

Production for the Year 1936 was 301,127 tons; compared with the estimated production (see page 12 of January "ASBESTOS") of 307,596 tons. Of this total 3,441 tons were Crudes; 133,263 tons fibres; and 164,423 tons of shorts.

Imports into U. S. A.

(Figures published by U. S. Dept of Commerce)

Unmanufactured Asbestos.	November 1935 Tons (2240 lbs.)	November 1936 Tons (2240 lbs.)
Africa (Br. S.)	5	589
Canada	14,503	21,733
Cyprus, Malta & Gozo	111	.....
Italy	33	152
U. S. S. R. (Russia)	.....	5
United Kingdom	.....	16
	14,652	22,495
Value	*$494,031*	*$780,740*

Tabulation of Crudes and Fibres (by Grades):		
Crude (Africa—Br. S.)	5	589
Crude (Canada)	135	164
Crude (U. S. S. R.)	.....	5
Crude (United Kingdom)	.....	16
Mill Fibre (Canada)	5,482	7,209
Lower Grades (Canada)	8,886	14,360
Lower Grades (Cyprus, etc.)	111	.....
Lower Grades (Italy)	33	152
	14,652	22,495

Manufactured Asbestos Goods:	November 1935 Pounds
Austria (Pkg., Fabricated & Unfabricated)	2,099
Belgium (Shingles)	224,351
Germany (Pkg., Fabricated & Unfabricated)	692
United Kingdom (Yarn)	3,266
	230,408
Value	*$ 5,536*

There were also imported $153 worth of materials not classified as to kind, $117 worth coming from Austria, $25 from Germany and $11 from the United Kingdom, a total value of all asbestos manufactures imported during November 1936 of $5,689.

Exports from U. S. A.

Exports of Unmanufactured Asbestos during November 1936 amounted to 31 tons, valued at $4,530, compared with 114 tons, valued at $24,002 in November 1935.

Exports of Manufactured Asbestos Goods from U. S. A.

	November 1935		November 1936	
	Pounds	Value	Pounds	Value
Paper, Mlbd., and Rlbd.	116,417	$13,294	75,973	$5,874
Pipe Covering & Cement	228,200	11,416	241,803	11,594
Textiles, Yarn & Pkg.	123,900	51,665	107,236	52,366
Brake Lining—				
Molded & Semi-molded	.....	48,220	.....	47,380
Not molded	104,326[1]	20,923	142,539[1]	23,099
Clutch Facings	.....	.....	21,700[3]	7,225
Magnesia and Mfrs. of	146,773	11,470	209,339	14,888
Asbestos Roofing	75,196[2]	61,366	3,912[2]	13,125
Other Manufactures	144,584	13,983	287,003	20,359

[1]Lin. Ft. [2]Sqs. [3]Units

Exports of Raw Asbestos from Canada.

(Figures by Dominion Bureau of Statistics)

	December 1935		December 1936	
	Tons (2000 lbs.)	Value	Tons (2000 lbs.)	Value
United Kingdom	371	$ 32,244	511	$ 26,726
United States	7,248	378,628	7,606	411,253
Australia	258	12,801	388	19,355
Belgium	1,036	61,731	2,002	132,984
France	938	55,213	2,015	127,917
Germany	75	6,787	3,242	238,606
Hungary	20	960	.....	.....
Japan	5,114	201,032	1,275	51,435
Netherlands	687	46,003	42	1,719
Poland	.....	.....	93	7,651
Portugal	.....	.....	5	179
Spain	98	5,821	.....	.....
Uruguay	25	2,398	.....	.....
	15,870	$803,618	17,179	$1,017,825
Sand and Waste				
United Kingdom	274	5,300	433	7,357
United States	9,004	141,410	14,107	226,086
Australia	.....	.....	10	226
Belgium	80	1,057	498	9,075
France	60	805	120	2,731
Germany	130	1,718	1,159	24,223
Japan	45	1,315	35	770
Netherlands	187	3,982	.....	.....
Portugal	.....	.....	5	111
Sweden	.....	.....	52	550
	9,780	$155,587	16,419	$ 271,129
	25,650	*$959,205*	*33,598*	*$1,288,954*

Imports and Exports by England

Imports of Raw Material.

	December 1935 Tons (2240 lbs.)	Value	December 1936 Tons (2240 lbs.)	Value
From Africa (Rhodesia)	1,490	£35,515	1,999	£50,999
From Africa (U. of South)	467	7,456	867	11,489
From Australia	.....	.....	12	337
From Canada	863	11,459	1,793	23,407
From Cyprus	23	132	267	2,261
From Finland	22	152	12	87
From Kenya	.....	.....	2	60
From Italy	3	194	4	458
From Soviet Union (Russia)	68	2,815	292	5,101
From U. S. of America	.....	.....	3	17
	2,936	£57,723	5,251	£94,216

Exports of Asbestos Manufactures:

	December 1935 Cwts.	Value	December 1936 Cwts.	Value
To Irish Free State	3,365	£ 2,852	3,668	£ 3,874
British India	4,543	8,739	2,786	7,879
Australia	1,184	5,621	948	5,812
Other British Countries	13,260	21,701	24,174	34,991
Netherlands	1,007	3,320	840	3,893
Belgium	350	3,080	892	3,855
France	415	2,856	212	2,774
Italy	67	620	191	2,974
Other Foreign Countries	12,463	31,334	10,090	22,103
	36,654	£80,123	43,801	£88,155

Exports of Raw Asbestos from South Africa.

	September 1936 Tons (2000 lbs.)	Value	October 1936 Tons (2000 lbs.)	Value
Algeria	.....	£	10	£ 188
Australia	244	3,142	224	2,810
Belgium	79	975	45	338
Canada	.....	.....	15	217
France	84	1,624	156	2,619
Germany	41	792	146	3,737
Holland	.....	.....	2	119
India	23	139	75	454
Japan	169	1,863	166	1,749
United Kingdom	1,566	23,184	1,428	15,930
United States	98	1,932	320	6,414
Portugal	10	209	.....	.....
Sweden	3	70	.....	.....
	2,317	£33,930	2,587	£34,575

SUMMARY FOR THE YEAR—CANADA

Exports of Raw Asbestos from Canada.

	Year 1935		Year 1936	
	Tons (2000 lbs.)	Value	Tons (2000 lbs.)	Value
United Kingdom	4,584	$ 290,569	6,817	$ 405,712
United States	61,059	3,079,366	77,691	4,052,187
Argentina	.....	13	28	1,118
Austria	.....	15	.....	.....
Australia	2,004	99,632	2,055	103,271
Belgium	4,814	270,606	8,058	455,828
Br. India	40	2,000	120	6,000
Columbia	.....	.....	2	230
Czechoslovakia	.....	55	.....	.....
Dutch East Indies	3	150	.....	.....
France	3,781	254,142	6,968	473,406
Germany	4,913	438,062	12,811	987,125
Hungary	20	970	.....	.....
Italy	806	74,435	136	11,444
Japan	15,597	628,597	21,200	856,167
Netherlands	1,671	110,725	164	5,634
Norway	.....	.....	5	350
Poland	114	7,325	286	21,684
Portugal	20	1,538	5	179
Spain	710	37,328	201	11,182
Uruguay	50	4,648	.....	.....
	100,186	$5,300,176	136,547	$7,391,517
Sand and Waste				
United Kingdom	3,595	$ 75,516	4,566	$ 84,711
United States	92,810	1,440,995	146,081	2,350,527
Argentina	30	296	46	858
Australia	3	66	10	231
Belgium	833	14,407	1,606	27,364
Brazil	11	176	10	429
Br. India	60	720	60	750
Cuba	30	324	90	537
France	320	6,200	1,091	21,201
Germany	1,438	27,669	3,423	68,911
Japan	100	3,061	181	3,496
Mexico	.....	203	.....	.....
Netherlands	700	14,776	110	2,233
Poland	.....	.....	128	2,683
Portugal	.....	.....	5	111
Puerto Rico	30	297	30	330
Sweden	60	721	241	2,971
Venezuela	5	54	.....	.....
	100,025	$1,585,481	157,678	$2,567,343
	200,211	*$6,885,657*	*294,225*	*$9,958,860*

SUMMARY FOR THE YEAR—ENGLAND

Imports of Raw Material

	Year 1935		Year 1936	
	Tons (2240 lbs.)	Value	Tons (2240 lbs.)	Value
From Africa (Rhodesia)	11,892	£274,345	16,679	£382,274
Africa (U. of S.)	10,938	155,826	12,093	177,431
Africa (Port. E.)	.....	1	.....	7
Australia	145	2,006	147	2,885
Austria	60	414	.....	.....
Belgium	2	37	10	105
Br. India	7	342	1	6
Canada	7,168	83,997	10,219	117,886
Cyprus, Malta&Gozo	177	6,769	1,605	18,687
Czechoslovakia	2	19	.....	.....
Denmark	.....	.....	100	1,637
Finland	95	625	102	787
France	.....	.....	6	40
Germany	23	630	16	1
Italy	56	2,606	4	477
Kenya	.....	.....	2	60
Netherlands	.....	71	29	1,026
Soviet U. (Russia)	1,230	31,966	1,854	29,995
Switzerland	.....	2	.....	.....
U. S. of America	64	1,446	27	664
Venezuela	47	653	62	1,528
	31,906	£561,755	42,956	£735,496

Exports of Asbestos Manufactures

	Year 1935		Year 1936	
	Cwts.	Value	Cwts.	Value
To Irish Free State	43,226	£ 38,827	44,080	£ 41,697
British India	42,146	88,608	48,434	97,364
Australia	11,784	61,255	12,549	68,279
Other British C'tries	154,466	237,117	248,792	313,021
Netherlands	13,702	44,783	16,479	53,143
Belgium	6,540	39,034	7,242	41,624
France	7,580	32,567	5,355	35,611
Italy	4,585	43,853	516	6,550
Other Foreign C'tries	135,956	378,494	106,474	339,809
	419,985	£964,538	489,921	£997,098

NEWS OF THE INDUSTRY

BIRTHDAYS

C. J. Sherer, Vice President and Treasurer, Russell Mfg. Co., Middletown, Conn., February 18.

Clarence E. Witherspoon, President, Asbestos Construction Co., Inc., New York City, N. Y., February 20.

J. Albert Taylor, Vice President & Secretary, Wallace & Gale Co., Baltimore, Md., February 24.

Roland C. Sprinkmann, Treasurer, Fred Sprinkmann & Son, Milwaukee, Wis., February 26.

A. S. Johnson, Managing Director, Johnson's Co., Thetford Mines, P. Q., Canada, February 28.

W. A. Godfrey, Secretary & Manager, Cape Asbestos Co., Ltd., London, England, March 1.

J. P. O'Malley, O'Malley Brothers, Chicago, Ill., March 1.

D. P. Osterhout, Director, Keasbey & Mattison Co., Ambler, Pa., March 2.

Carl Bindman, Sales Mgr., Johnson's Company, Thetford Mines, P. Q., Canada, March 7.

E. J. Wilson, President, Elwood J. Wilson, Inc., New York City, N. Y., March 7.

P. M. Taft, President, P. M. Taft Asbestos Co., Holyoke, Mass., March 9.

A. B. Dougall, Asst. Secy., Thermoid Rubber Co., Trenton, N. J., March 10.

Harry A. Kieselbach, General Manager, Johns-Manville Corp., New York City, N. Y., March 14.

We extend to all these gentlemen congratulations and best wishes.

F. D. FARNAM & CO., 209 North Desplaines, St., Chicago, has been appointed distributor for Vermont Asbestos in the Chicago area.

E. M. VOORHEES, Vice President and Director of Johns-Manville Corporation, will become vice chairman of the finance committee of the United States Steel Corporation on April 1. Mr. Voorhees succeeds Edward R. Stettinius, Jr., who became chairman of U. S. Steel Co., on January 1, 1936. Mr. Voorhees has been with Johns-Manville more than nine years, being consecutively general auditor, treasurer, secretary, vice president and director. Mr. Voorhees will remain as a vice president of Johns-Manville until he takes up his new position at U. S. Steel on April 1. He began his business career with the firm of Hollis H. Sawyer & Co., of Boston, later going to Manila, P. I., with the Pacific Commercial Co., an exporting and importing firm; then three years with the U. S. Rubber Company in New York, and before joining Johns-Manville he was engaged in industrial en-

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gineering for William A. Harriman & Co., and Sanderson & Porter. Mr. Voorhees was born in Amsterdam, New York, forty-five years ago and was graduated from Dartmouth College in 1914.

CHARLES H. ROBERTS, formerly general auditor for Johns-Manville, has been promoted to the position of Comptroller. Mr. Roberts has been with Johns-Manville since January 1, 1928, as assistant general auditor and general auditor. Previously he had served in executive positions with Julius Kayser & Co., New York, Splitdorf Electrical Co., Newark; U. S. Rubber Co., New York; Hess-Bright Manufacturing Co., Philadelphia; Mercer Automobile Co., and J. A. Roeblings Sons Co., both of Trenton. He is a native of Bucks Co., Pa., having been born there May 8, 1890. He received his business education at the Wharton School of Finance, University of Pennsylvania.

ARTHUR OLSEN, who joined Johns-Manville on January 1st, 1937, has been made Treasurer, following the resignation of E. M. Voorhees. Mr. Olsen has served in executive capacities with Burns Brothers, General Stationers, International Telephone & Telegraph Corp., Allied Chemical & Dye Corporation, International Business Machines, Chicago Daily News and Ernst & Ernst. He was born in Chicago, April 6, 1888, attended Northwestern University and was a lieutenant in the Navy during the World War.

VANDIVER BROWN, formerly assistant secretary of Johns-Manville, has been appointed Secretary. Mr. Brown is a native of Texas, born at Tolar, April 24, 1901. He received a Bachelor of Arts degree from Rice Institute, Houston, and his LL. B. from Harvard. Before becoming connected with Johns-Manville in 1930 he was with Jenkins & Carpenter and with Hughes, Rounds, Schurman & Dwight, New York law firms.

W. I. WAITE, has been made secretary of the Officers' Board of Johns-Manville. He has been with Johns-Manville since 1928. Mr. Waite was born at Attleboro Falls, Mass., October 14, 1894, but spent most of his early life, until the War, at Concord, N. H. During the war he was a first lieutenant in the Air Service. After the war he was with the U. S. Rubber Company as an expert on factory planning and general office procedure, and later office manager.

CANADIAN ASBESTOS COMPANY, Montreal, celebrates in 1937 its fortieth year, the first sale of the company having been made on October 4, 1897 and amounting to 60c. The company still occupies the premises on which the business was started forty years ago.

THE LEHON COMPANY of Chicago, manufacturers of asphalt roofings and asbestos cement shingles, is erecting a new $200,000 plant in Memphis, Tenn. The plant is to be used for the manufacture of asphalt roofings.

TURNER & NEWALL, LTD., have arranged for the opening up, development and equipment of the Havelock asbestos mines in Swaziland, which has been proved to be a property of great promise.

The company has also decided to build and equip two additional factories in India as business in that country has grown at such a rate that the first works established there no longer suffice to meet the demand for the company's products.

VERMONT ASBESTOS CORPORATION recently announced completion of mill additions and equipment improvements involving expenditures of approximately $200,000 at its asbestos mines at Eden, Vermont. The improvements, which will increase the number of men employed to more than 140, have, besides doubling the output of the mill, made possible the production of grades of asbestos fibre not heretofore recovered, including fine particles known as "floats", used in the production of hot and cold molded products, composition flooring, lubricants, etc., and special asbestos for brake lining.

The asbestos is of the chrysotile variety.

ARTICLE, published in the December 26th issue of the South African Mining and Engineering Journal, and to be continued in later issues, has the title "Asbestos in the Union" and gives a very comprehensive of the Asbestos Industry in that country at the present time, together with tables of production and sales.

AUTOMOBILE PRODUCTION

Automobile Production for the year 1926 was 4,616,857, this including both the United States (4,454,535) and Canada (162,322.)

The Production for 1935 was 4,119,811—United States 3,946, 934; Canada 172,877.

It is interesting to compare these figures with the total for 1929, which was 5,621,715; 1928 production totalled 4,630,000.

PATENTS

Building Assembly and Lining Means for Use Therein. No. 2,061,882. Granted on November 24, to George E. Shipway, Darien, Conn., assignor to Johns-Manville, New York. Application September 5, 1935. Serial No. 39,261.

A wall assembly including a supporting structure, facing units meeting at edge portions to form a flush joint in front of the supporting structure and provided with grooves one in the edge portion of each facing unit and spaced equally from the outer faces of the facing units and extending inwardly from the edge portions thereof on each side of joint, aligning means engaged in the said grooves nad maintaining the outer faces of the said units in alignment, and means securing the aligning means to the said supporting structure and holding the back portions of the facing units firmly thereagainst.

Molded Brake Lining. No. 2,061,918. Granted on November

24 to William Nanfeldt, Clifton, N. J., assignor to Worldbestos Corporation, Paterson, N. J. Application February 2, 1931. Serial No. 512,892. Renewed April 22, 1936.

A process for making brake bands out of a moldable composition containing rubber, rubber solvent, sulphur and filler ingredients, which consists in forming the material into separated layers, forcing the layers together into a unitary strip, removing the solvent from said strip, forming the strip roughly to size by the application of transverse pressure thereon, removing the original edges of said strip, curing the strip by the application of heat and pressure in suitable molds, removing one of the flat surfaces of said strip and finally relieving the internal stresses of the strip by flexing operation.

Reinforced Toothed Friction Disk. No. 2,062,480. Granted on December 1 to Frederick C. Stanley, Bridgeport, Conn., assignor to Raybestos-Manhattan, Bridgeport, Conn. Application March 17, 1933. Serial No. 661,260.

An annular friction disk comprising a body having relatively high frictional characteristics, constructed of compressed fibrous material held together by a suitable binder and having splines integral with the body of the disk, said disk being provided with an endless metal reinforcing plate, embedded in the body of the disk, said plate being also imbedded in the splines and conforming in shape therewith, the outer faces of the disk comprising friction material whereby frictional engagement may take place at said outer faces.

Building Plate. No. 2,062,879. Granted on December 1 to Alphonse Hammenecker, Mariekerke, Belgium, assignor to the Ruberoid Company, New York. Application June 22, 1933. Serial No. 677,083. In Belgium June 29, 1932.

A building plate comprising about 25% asbestos fibre and about 30 to 40% each of lime and of active silica.

Insulating Material. No. 2,062,996. Granted on December 1 to Johannes Leppik, New York, assignor to Telsit Insulation Corporation, New York. Application April 22, 1933. Serial No. 667,507.

A mixture for kneading with water to form a plastic heat insulation composition consisting by volume ratio of

Pure Clay	0.8 to 1.3
Waste Hemp Fines	1.5 to 2.5
Balsc Wood Fine Particles	4.5 to 8.0
Milled Paper	1.2 to 2.2
Asbestos	1.2 to 2.5

Art of Spinning. No. 2,064,821. Granted on December 22, 1936 to Philip D. Cannon, Plainfield, N. J., Assignor to Johns-Manville Corp. Application March 3, 1933. Serial No. 659,465.

The method of spinning asbestos fibers which comprises forming the fibers into roving, winding the roving into a self-sustaining unit adapted to permit withdrawal of the roving there from, rotating the unit, unwinding and withdrawing the roving

from the rotating unit, confining the resulting ballooning of the roving to the inside of a cylinder surrounding the said unit and rotated synchronously therewith, and leading the strand in a course that is free and that permits spinning from a point immediately adjacent to the said unit to a point at which rotation of the strand is prevented.

Construction Material. No. 2,065,045. Granted on December 22, 1936, to Juel Irvin Broback, Westfield and George J. Martin, Denville, N. J. Application April 25, 1933. Serial No. 667,922.

2. A fire resisting building board, comprising a core, said core including strips of wood having their edges cemented together, sheets of wood veneer cemented to the opposite faces of the core, sheets of fire resisting fabric cemented to the outer faces of the sheets of veneer, said fire resisting fabric including woven metal strands having a covering of asbestos yarn wound thereon, and sheets of veneer cemented to the outer faces of the fire resisting fabric.

Wall. No. 2,066,005. Granted on December 29 to Edward M. Jenkins, Somerville, N. J. Assignor to Johns-Manville Corporation, New York. Application Jan. 10, 1936. Serial No. 58,534.

Building assembly comprising a stud, units of fastening material of generally plane surface made in flush relationship, their edges to form a joint therebetween and in front of the face of the stud, a resiliently compressible strip gasket disposed between the said joint and face of the stud and means securing the said units to the stud and tightly against the gasket, the said gasket having on the face thereof in contact with the said units, ridges extending longitudinally on both sides of the said joint so as to provide relatively small areas of contact of the said units against the gasket.

Building Assembly and Fastening Means. No. 2,066,006. Granted on December 29 to George D. Kellogg, Pelham, N. Y. Assignor to Johns-Manville Corporation. Application September 10, 1935. Serial No. 39,890.

A building assembly comprising a frame member of the type of a stud, units of fastening material met to form a joint in front of the said member, a resiliently yieldable gasket disposed between the said joint and member and means including each element secured to the said member and a springy element secured to one of the said units supporting the said units upon the frame member and drawing them under tension against the said gasket.

Armored Machinery Packing. No. 2,066,270. Granted on December 29 to Cecil R. Hubbard, Palmyra, N. Y. Assignor to Garlock Packing Company, Palmyra. Application October 9, 1935. Serial No. 44,170.

A gasket comprising a ring of flexible packing material having a toe portion and a heel portion and flexible, reinforcing armor affixed to and extending completely over said portions, the armor for each portion comprising a layer of braided strands of metal.

Match. No. 2,066,399. Granted on January 5, 1937 to Harold W. Greider, Wyoming, O., and Marion F. Smith, Cincinnati, O. Assignors to Philip Carey Mfg. Co. Application Sept. 21, 1933. Serial No. 690,334.

A match comprising a non-combustible fibrous match splint body, containing fibre, of which fibre about 50% to about 90% is asbestoform mineral fibre and about 10% to about 50% is alkaline refined fibre, and soluble silicate permeating said fibre, said match splint body carrying thruout a portion of the length thereof, an oleaginous or waxy substance which is capable of supporting combustion as carried by said match splint body and an ignitable tip adjacent and adapted to ignite said substance.

Cork Insulation. No. 2,066,988. Granted on January 5, 1937, to Louis R. Lee, Rohrerstown, Pa. Assignor to Armstrong Cork Co., Lancaster, Pa. Original application November 9, 1931. Serial No. 573,834.

Divided and this application April 6, 1935. Serial No. 15,-043. In Spain October 31, 1932. Description upon request.

Insulation. No. 2,067,015. Granted on January 5, 1937, to Carl Georg Munters, Stockholm, Sweden. Assignor to Aktiebolaget Termisk Isolation, Stockholm. Application December 15, 1934. Serial No. 756,015.

Heat insulation comprising hermetically closed element which contains a gas having a lower heat conductivity than that of air at corresponding pressure, and means counteracting heat principally due to convection and radiation, the outer and inner members of the element being made of metal and the transverse walls connecting said members being of poor heat conducting material and having a length greater than the shortest distance between the members they connect.

TRADE MARKS

This information is supplied by the National Trade Mark Co., Munsey Bldg., Washington, D. C., who will conduct free of charge an advance search on any trade mark our readers may contemplate adopting.

Safetybestos. Serial No. 372, 953. The Bondall Company, St. Louis, Mo. Filed December 23, 1935. For Molded products containing asbestos, viz: brake linings and clutch facing. Passed Decemebr 29.

Protokote. Serial No. 385,017. United States Gypsum Company, Chicago, Ill. Filed October 31, 1936. For Asphalt Roof Cement, Asphalt Roof Coating, and Asbestos Fibre Coating. Passed January 5.

Labstone. Serial No. 385,483. Keasbey & Mattison Company, Ambler, Pa. Filed Nov. 13, 1936. For Asbestos Boards, Asbestos Sheets, Asbestos Lumber and Asbestos Building Materials in Flat and Sheet form. Passed January 5.

ASBESTOS MILLBOARD--
finds itself in the Laboratory

By R. L. Fine

The National Bureau of Standards recently put asbestos millboard to a new use, one that raises interesting possibilities for other applications.

The millboard was used in connection with a specially constructed apparatus for the separation of arsenic, antimony and tin from one another, an action highly desirable, if not often necessary, in proper chemical analysis.

The apparatus in this instance consisted of a 50 ml. bulb for holding the acid concerned, an extended side tube for the purpose of introducing a stream of carbon dioxide, and a 200 ml. distilling flask into which and from which the distillation flowed. Made entirely of glass, this apparatus is clamped to a ring stand. It was desirable for the tests to be made that the glass should be entirely free from the three elements involved—arsenic, antimony and tin. Therefore, technologists at the Bureau of Standards decided upon an asbestos product.

The 200 ml. distilling flask, the central portion of the complete apparatus, rests on a piece of asbestos millboard about 18x18 cm. in size, in the center of which there is drilled a round hole 4.5 cm. in diameter. Use of asbestos millboard thoroly insulates the distilling flask from any and all of the three elements mentioned.

There is a story told of a horse, carrying fire fighting equipment, which was lost in dense smoke in a forest fire in Banff National Park. The next day the fire fighters found him lying on a damp patch of muskeg, and altho the pack had been burned off his back and his halter rope still smoldered, the horse was unharmed except for the loss of six inches of his tail in the blaze. The horse is now called Asbestos!

Perhaps well named, but imagine the strain of saying "Whoa, Asbestos," "Gid-dap, Asbestos" and so on!

THIS and THAT

Facts. Johns-Manville is one of the world's largest manufacturers of building materials, home and industrial insulation, brake linings, acoustical products, diatomaceous earth products, etc. It has more than 10,000 employees, 11 manufacturing plants and two mines producing asbestos.

Send us terse facts concerning **your** company and we will publish them.

Meetings. The American Society for Testing Materials will hold its 1937 Regional Meeting at The Palmer House, Chicago, on March 2nd and 3rd, and group meetings of its several Committees at the same place on March 1 to 5 inclusive.

Its Annual Meeting (Fortieth) will be held June 28 to July 2 inclusive at The Waldorf-Astoria, New York City, combining with this its Fourth Exhibit of Testing Apparatus and Related Equipment.

The International Association for Testing Materials (International Congress) will be held in London, April 19 to 24, 1937.

Uses Useful. A reader tells us that he has found the little pamphlet "Uses of Asbestos and Asbestos Products" very useful[1], having sent out 75 of them to various salesmen, customers and so on.

Gasket Cutter. The Allpax Company at Mamaroneck, N. Y., has developed and has for sale a Gasket Cutter which is said to cut gaskets quickly from such materials as rubber, duck, canvas, cork, felt, cardboard, compressed asbestos, etc. It is said to be simple to operate, will cut gaskets from 1 inch in diameter to 36 inches, with any width of flange and with cleancut edges, Will operate in thicknesses up to 5/8ths of an inch. Further information can be obtained by addressing the manufacturers direct—please mention "ASBESTOS".

Insulating Brick. A new type of 2000-degree insulating brick, known as JM-20 has been placed on the market by Johns-Manville and is especially designed for use behind refractory walls in various types of high temperature industrial equipment, including boiler settings, ceramic kilns, steel plant equipment and practically all types of furnaces. It is produced by combining a high quality refractory clay with a specially manufactured fibrous, light weight, inorganic aggregate. P. S. It doesn't contain any asbestos.

[1]See pages 10 to 16 November 1936 "ASBESTOS".

ASBESTOS

TEXTILE PRODUCTS

made of asbestos fibre obtained from Africa, Arizona and Canada—each selected for specific qualities and properly blended to produce:—

Maximum strength and heat resistance.
Minimum iron for electrical purposes.
Non-scoring rod and valve packing.
Frictional properties in brake lining.

GARCO roving, yarn, cord, cloth, tape, tubing, rope, wick, wicking and other asbestos textile products give satisfaction because they are made of the best fibre for the particular purpose on modern equipment by skilful workmen.

Commercial Grade
Underwriters' Grade
Grade AA
Grade AAA
Grade AAAA

Write for Textile Catalog

GENERAL ASBESTOS & RUBBER DIVISION

of

RAYBESTOS-MANHATTAN, Inc.
NORTH CHARLESTON, S. C.

If—

If—your efforts are criticized, you must have done something worth while, and you may earn something valuable.

If your business rival plays more golf than you do, you have more time to attend to his customers than he has.

If your neighbor drives a better car than you do, that doesn't make your old car any the worse.

If someone calls you a fool, go into silence. He may be right.

If your competitor gets business by unscrupulous methods, he can't hold it that way.

If the world laughs at you, laugh right back at it. It's just as funny as you are.

—*Bloomfield Works News, G. E.*